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- (71) Applicant (for all designated States except US): RI-BOMED BIOTECHNOLOGIES, INC. [US/US]; 4829 South 38th Street, 1st Floor, Phoenix, Arizona 85040 (US).
- (71) Applicant and
- (72) Inventor: HANNA, Michelle, M. (US/US); 3725 East Atlanta Avenue, Phoenix, Arizona 85040 (US).
- (74) Agents: BUGAISKY, Lawrence, B. et al.; Sterne, Kessler, Goldstein & Fox P.L.L.C., 1100 New York Avenue, N.W., Washington, District of Columbia 20005 (US).

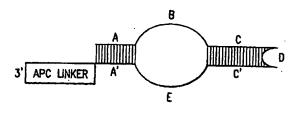
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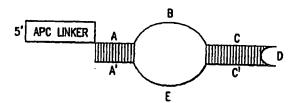
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as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE,

[Continued on next page]

(54) Title: MOLECULAR DETECTION SYSTEMS UTILIZING REITERATIVE OLIGONUCLEOTIDE SYNTHESIS





(57) Abstract: The present invention provides methods for detecting the presence of a target molecule by the use of nucleotide analogs containing moieties that enable detection. Such analogs may be incorporated into nucleic acids. In one embodiment, nucleotide analogs are used in a process generating multiple detectable oligonacleotides through reiterative enzymatic oligonacleotide synthesis events on a defined polynucleotide sequence. The methods generally comprise using a nucleoside, a mononacleotide, an oligonacleotide, or a polynucleotide, or analog thereof, to initiate synthesis of an oligonacleotide product that is substantially complementary to a target site on the defined polynucleotide sequence; optionally using nucleotides or nucleotide analogs as oligonacleotide chain elongators or chain terminators to terminate the polymerization reaction; and detecting multiple oligonacleotide products that have been synthesized by the polymerase.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU		REAU
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NOTIFICATION OF THE RECORDING	BUGAISKY, Lawrence, B.	
OF A CHANGE	Sterne, Kessler, Goldstein & Fox P.L.L.C.	
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1. The following indications appeared on record concerning:		
the applicant the inventor the agent the common representative		
Name and Address	State of Nationality	State of Residence
US US		US
Telephone No.		
Facsimile No.		
Teleprinter No.		
2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:		
the person the name the address the nationality the residence		
Name and Address	State of Nationality	State of Residence
HANNA, Michelle, M.	US	US
3725 East Atlanta Avenue Telephone No. Phoenix, Arizona 85040		
1 United States of America		
EPO-DG 1 Facsimile No.		
2 7. 08. 20		
2 /. 115, 201	Jo Perephinier No.	
TEANT OF THE PARTY		
3. Further observations, if necessary: IEAM 14 Please note the change in the above mentioned person's status from Applicant/Inventor for		
all designated States to Applicant for Us only and Inventor for all designated States.		
4. A copy of this notification has been sent to:		
X the receiving Office	X the designated Offices concerned	
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34, chemin des Colombettes 1211 Geneva 20, Switzerland	S. GROBET	
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